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EXAMINER

CHOI, JACOB Y

ART UNIT PAPER NUMBER

2875

DATE MAILED: 03/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,268

Applicant(s)

MARCHETTI, RANDY

Examiner

Jacob Y Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>04/23/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertling et al. (USPN 5,353,203) in view of Sumada et al. (USPN 6,439,753).

Regarding claims 1, 9, & 18 Bertling et al. discloses a reflector (12, 20) comprising a first (20) and second (12) reflective concave surface regions adjacent to one another (column 3, lines 10-30), the first reflective (20) concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near field beam (low beam headlight; column 4, lines 40-65), and the second (12) reflective concave surface region comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam (column 4 & 5, lines 65-35), a first light source positioned substantially at the first focal point (at the light source 22), the first light source comprising an incandescent lamp or gas discharged lamp (column 3, lines

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10-20), a second light source positioned substantially at the second focal point (at the light source 14), the second light source comprising an incandescent lamp or gas discharged lamp (column 2, lines 55-65), and a light-transmissive cover fitted over the reflector (16).

Bertling et al. discloses a reflector comprising first and second reflective concave surface regions adjacent to one another, the first reflective concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near filed beam (low beam headlight; column 4, lines 40-65), the first reflective concave surface region having a first peripheral edge (outer ring of the reflector 20) with opposite ends and a first internal edge (discontinuity) extending between the opposite ends of the first peripheral edge, the second reflective concave surface region comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam (column 4 & 5, lines 65-35), the second reflective concave surface region having a second peripheral edge (outer ring of the reflector 12) with opposite ends and a second internal edge (discontinuity) extending between the opposite ends of the second peripheral edge, the respective opposite ends of the first and second peripheral edges interfacing one another (connection point/line of outer shape of the reflector 12 & 20 and discontinuity) and the first and second internal edges interfacing one another (discontinuity between the upper reflector portion 12 and the lower reflector portion 20), a first light source positioned substantially at the first focal point, the first light source

comprising an incandescent lamp or gas discharged lamp, a second light source positioned substantially at the second focal point, the second light source comprising an incandescent lamp or gas discharged lamp, and a light-transmissive cover fitted over the reflector.

Bertling et al. discloses a first reflective concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near field beam, the first reflective concave surface region having a first arcuate peripheral edge with opposite ends and a first internal edge extending between the opposite ends of the first arcuate peripheral edge, a second reflective concave surface region adjacent the first reflective concave surface region and comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam, the second reflective concave surface region having a second arcuate peripheral edge with opposite ends and a second internal edge extending between the opposite ends of the second arcuate peripheral edge, the respective opposite ends of the first and second peripheral edges interfacing one another to define a substantially circular outer perimeter of the reflector and the first and second internal edges interfacing one another.

Bertling et al. discloses the claimed invention except a specific light source(s) that is either a halogen or a high intensity discharge bulb. Sumada et al. teaches that it is known to utilize a well-used light source, such as a halogen & HID, for a vehicle headlight. It would have been obvious to one having ordinary skill in the art at the time

the invention was made to use modification in Bertling et al. as taught by Sumada et al. in order to utilize well known and different light source that is suitable for a vehicle head lighting system.

Regarding claim 2, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the reflector is *substantially* rounded.

Regarding claim 3, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the reflector is *substantially* circular.

Regarding claim 4, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first and the second reflective concave surface regions are integral with one another.

Regarding claim 5, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the reflector is a unitary piece.

Regarding claim 6, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 7, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the second curvature is different than the first curvature (figure 2).

Regarding claim 8, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the high intensity discharge light source comprises a xenon light source (gas discharge lamps includes xenon light source).

Regarding claim 10, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first and second peripheral edges are arcuate (figure 2).

Regarding claim 11, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first and second peripheral edges define a substantially circular outer perimeter of the reflector (figure 2).

Regarding claim 12, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first and second reflective concave surface regions are integral with one another (figure 1 & 2).

Regarding claim 13, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the reflector is a unitary piece.

Regarding claim 14, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first and second internal edges interface and adjoin one another to define a ridge (21).

Regarding claim 15, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 16, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the second curvature differs from the first curvature.

Regarding claim 17, Bertling et al. in view of Sumada et al. discloses the claimed invention, explained above. In addition, Bertling et al. discloses the high intensity discharge light source comprises a xenon light source.

Regarding claim 19, Bertling et al. discloses the first and second reflective concave surface regions are integral with one another.

Regarding claim 20, Bertling et al. discloses the reflector is a unitary piece.

Regarding claim 21, Bertling et al. discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 22, Bertling et al. discloses the second curvature is different from the first curvature.

3. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (USPN 6,120,169) in view of Sumada et al. (USPN 6,439,753).

Regarding claims 1, 9, & 18, Sato discloses a reflector comprising a first and second reflective concave surface regions adjacent to one another, the first reflective concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near field beam, and the second reflective concave surface region comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam, a first light source positioned substantially at the first focal point, the first light source comprising a high intensity discharge light source, a second light source positioned substantially at the second focal point, the second light source comprising a halogen light source, and a light-transmissive cover fitted over the reflector.

Sato discloses a reflector comprising first and second reflective concave surface regions adjacent to one another, the first reflective concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near filed beam the first reflective concave surface region having a first peripheral edge with opposite ends and a first internal edge extending between the opposite ends of the first peripheral edge, the second reflective concave surface region comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam, the second reflective concave surface region having a second peripheral edge with opposite ends and a second internal edge extending between the opposite ends of the second peripheral

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edge, the respective opposite ends of the first and second peripheral edges interfacing one another and the first and second internal edges interfacing one another, a first light source positioned substantially at the first focal point, the first light source comprising a halogen bulb or an electric discharge bulb, a second light source positioned substantially at the second focal point, the second light source comprising a halogen bulb or an electric discharge bulb, and a light-transmissive cover fitted over the reflector.

Sato discloses a first reflective concave surface region comprising a first curvature for directing light emanating from a first focal point adjacent to but spaced apart from the first reflective concave surface region into a near field beam, the first reflective concave surface region having a first arcuate peripheral edge with opposite ends and a first internal edge extending between the opposite ends of the first arcuate peripheral edge, a second reflective concave surface region adjacent the first reflective concave surface region and comprising a second curvature for directing light emanating from a second focal point adjacent to but spaced apart from the second reflective concave surface region into a far field beam, the second reflective concave surface region having a second arcuate peripheral edge with opposite ends and a second internal edge extending between the opposite ends of the second arcuate peripheral edge, the respective opposite ends of the first and second peripheral edges interfacing one another to define a substantially circular outer perimeter of the reflector and the first and second internal edges interfacing one another.

Sato discloses the claimed invention except a specific light source(s) that is either a halogen or a high intensity discharge bulb. Sumada et al. teaches that it is

known to utilize a well-used light source, such as a halogen & HID, for a vehicle headlight. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use modification in Sato as taught by Sumada et al. in order to utilize well known and different light source that is suitable for a vehicle head lighting system.

Regarding claim 2, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the reflector is *substantially* rounded.

Regarding claim 3, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the reflector is *substantially* circular.

Regarding claim 4, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first and the second reflective concave surface regions are integral with one another.

Regarding claim 5, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the reflector is a unitary piece.

Regarding claim 6, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 7, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the second curvature is different than the first curvature.

Regarding claim 8, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the high intensity discharge light source comprises a xenon light source.

Regarding claim 10, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first and second peripheral edges are arcuate.

Regarding claim 11, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first and second peripheral edges define a substantially circular outer perimeter of the reflector.

Regarding claim 12, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first and second reflective concave surface regions are integral with one another.

Regarding claim 13, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the reflector is a unitary piece.

Regarding claim 14, Sato discloses the first and second internal edges interface and adjoin one another to define a ridge.

Regarding claim 15, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 16, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the second curvature differs from the first curvature.

Regarding claim 17, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the high intensity discharge light source comprises a xenon light source.

Regarding claim 19, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first and second reflective concave surface regions are integral with one another.

Regarding claim 20, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the reflector is a unitary piece.

Regarding claim 21, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the first concave reflective surface region is parabolic and has a first optical axis passing through the first focal point, and further wherein the second concave reflective surface region is parabolic and has a second optical axis passing through the second focal point.

Regarding claim 22, Sato in view of Sumada et al. discloses the claimed invention, explained above. In addition, Sato discloses the second curvature is different from the first curvature.

Response to Arguments

4. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ashizawa et al. (USPN 6,394,636) – vehicular headlamp

Fujinami et al. (USPN 6,543,920) – vehicle headlamp

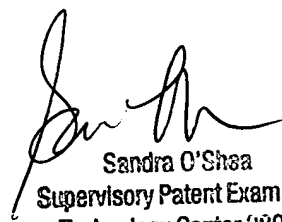
Mochizuki et al. (USPN 6,652,130) – vehicle headlamp

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



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